

**REMARKS**

Claims 1-14 stand rejected under 35 U.S.C. § 103 as being unpatentable over Kobayashi et al. '659 ("Kobayashi") in view of Patton et al. '840 ("Patton"). This rejection is respectfully traversed for the following reasons.

In order to expedite prosecution, Applicants' representative initiated a telephone interview with Examiner Wong to discuss the merits of the present application. Applicants and Applicants' representative would like to thank Examiner Wong for his courtesy in conducting the interview and for his assistance in resolving issues. During the interview, Applicants' representative explained why the present invention as currently recited in the pending claims is patentable over the cited prior art. The Examiner requested that the arguments be submitted as part of this response, after receipt of which the Examiner would reconsider the pending rejection. A summary of the interview follows.

The Examiner relies on elements 30 and 31 of Kobayashi as the claimed first and second estimators, respectively, and relies on the junction at the outputs of elements 31 and 32 as the claimed adder. However, elements 30 and 31 are merely conventional *controllers* for the rough-actuator and the precise-actuator (for magnetic head A), respectively. In this regard, it is noted that the Examiner already relies on element 30 as a controller for generating the driving signal (*see* page 3, lines 1-2 of the Office Action). Moreover, element 32 is simply a non-interference controller which operates to optimize head position without interference between the two precise-movement actuators (*see* col. 4, line 31 – col. 5, line 11 of Kobayashi). Indeed, Kobayashi is directed to balancing control of two magnetic heads 1, 2 each having a precise-movement actuator 5,6 and 7,8, respectively, and sharing a rough-movement actuator 11.

Accordingly, Kobayashi does not disclose or suggest adding signals corresponding to the estimations of the rough head-position and precise actuator-displacement *for a given head*, whereby the signal resulting from the addition is used to generate an error signal which effects correction of the signals driving the respective rough and precise actuator for the given head. Instead, the alleged addition in Kobayashi (junction at outputs of elements 31 and 32), as seen in Figure 1, merely results in a signal uA used to control just the precise-actuator A for head 1, and is unrelated to the control path for the rough actuator.

The aforementioned distinctions emphasize a broader difference between the present invention and Kobayashi. Specifically, Kobayashi is directed to balancing control of *two* heads each having precise-actuators and sharing a rough-actuator while the present invention can improve head position without increasing the number of servo sectors by, for example, adding general and fine estimations related to a given head to create an error signal for controlling the given head. In this regard, even assuming *arguendo* that Kobayashi disclosed estimators for precise and rough positions, the estimations at best would be used individually for their corresponding controller (i.e., rough-for-rough and precise-for-precise) and would not be added together to form an error signal reflective of both estimations used to correct driving signals for both actuators (i.e., rough and precise).

Moreover, it is noted that the Examiner does not rely on Patton for the aforementioned features of the present invention, and indeed, it appears that Patton does not obviate the deficiencies of Kobayashi. Accordingly, in view of the foregoing, it is respectfully submitted that Kobayashi and Patton, alone or in combination, do not disclose or suggest the present invention as recited in the pending claims.

The Examiner is directed to MPEP § 2143.03 under the section entitled "All Claim Limitations Must Be Taught or Suggested", which sets forth the applicable standard for establishing obviousness under § 103:

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. (citing *In re Royka*, 180 USPQ 580 (CCPA 1974)).

In the instant case, the pending rejection does not "establish *prima facie* obviousness of [the] claimed invention" as recited in the pending claims because the proposed combination fails the "all the claim limitations" standard required under § 103.

Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co.*, 819 F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as the independent claims are patentable for the reasons set forth above, it is respectfully submitted that all claims dependent thereon are also patentable. In addition, it is respectfully submitted that the dependent claims are patentable based on their own merits by adding novel and non-obvious features to the combination.

Based on the foregoing, it is respectfully submitted that all pending claims are patentable over the cited prior art. Accordingly, it is respectfully requested that the rejection under 35 U.S.C. § 103 be withdrawn.

### **CONCLUSION**

Having fully responded to all matters raised in the Office Action, Applicants submit that all claims are in condition for allowance, an indication for which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's

**Application No.: 10/692,652**

amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP



Ramyar M. Farid  
Registration No. 46,692

600 13<sup>th</sup> Street, N.W.  
Washington, DC 20005-3096  
Phone: 202.756.8000 RMF:men  
Facsimile: 202.756.8087  
**Date: August 3, 2005**

**Please recognize our Customer No. 20277  
as our correspondence address.**